



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue
Seattle, WA 98101

Reply To
Attn Of: OWW-130

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DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

James Bellatty, Manager
Water Quality Program
Department of Ecology
Eastern Regional Office
North 4601 Monroe
Spokane, Washington 99205-1295

Re: EPA review of Draft NPDES Permits for the City of Spokane Riverside Park Water Reclamation Facility #WA-002447-3, the Liberty Lake Sewer and Water District #WA-004514-4, Inland Empire Paper Company #WA-000082-5, and Kaiser Aluminum Fabricated Products LLC #WA-000089-2.

Dear Mr. Bellatty:

The Environmental Protection Agency (EPA) has reviewed the draft National Pollutant Discharge Elimination System (NPDES) permits for the facilities mentioned above. Listed below are our general and specific objections to the draft NPDES permits for these facilities and recommendations to resolve these objections. We have also included comments that do not rise to the level of objection.

I would like to emphasize that we appreciate the work your staff has done so far to address our concerns. They have been very cooperative in working with my staff to develop permit language responsive to our comments. This objection letter is our formal response to the draft permits. We look forward to continuing to work constructively with your staff to resolve these issues.

This letter is in accordance with the objection procedures identified in paragraph C2 of the NPDES Memorandum of Agreement (MOA) between Ecology and EPA. That provision requires that EPA "...comment upon, object to or make recommendations with respect to a draft permit..." within 30 days of the issuance of the draft permit unless EPA requests an extension. On September 27, 2007, EPA requested that the time period for its review be extended to 90 days until December 4, 2007.

We anticipate that we will be able to resolve these issues prior to the issuance of the final permits. If the proposed final permits do not adequately address our concerns, EPA will transmit a detailed statement of the reasons for EPA's continuing objection and the actions that Ecology must take to eliminate this objection. This action is in accordance with NPDES regulations at 40 CFR § 123.44(b)(2) and paragraph (C3) of the NPDES MOA between Ecology and EPA. Ecology may not issue final NPDES permits for these facilities until EPA's objections are resolved (40 CFR § 122.4(c)). EPA

requests that Ecology provide copies of the proposed final permits to EPA Region 10 for our review so that we can determine whether our objections have been resolved.

These objections are based in part on 40 CFR 123.44(c)(3) which states that "The procedures followed in connection with formulation of the proposed permit failed in a material respect to comply with procedures required by CWA or by regulations thereunder or by the Memorandum of Agreement" and 40 CFR 123.44(c)(8) which states that "The effluent limits of a permit fail to satisfy the requirements of 40 CFR 122.44(d)."

A. Our general objections to the draft permits include the following.

1. All of the final permits must contain WQBELs consistent with the approved WLAs for parameters identified in the "Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load Water Quality Improvement Report" (also known as the Spokane River dissolved oxygen TMDL) as required in 40 CFR 122.44(d)(1)(vii)(B). All of the facilities received wasteload allocations (WLAs) for CBOD, ammonia and total phosphorus in the proposed Spokane River dissolved oxygen TMDL. However, none of the draft permits include final water quality-based effluent limitations (WQBELs) for CBOD and ammonia that are consistent with the wasteload allocations in the draft dissolved oxygen TMDL. Furthermore, the City of Spokane Riverside Reclamation and Liberty Lake Sewer District Facility draft permits do not have final total phosphorus limits consistent with the wasteload allocations in the draft Spokane River dissolved oxygen TMDL.

If the approved version of the Spokane River dissolved oxygen TMDL contains WLAs which are revised as compared to the draft TMDL, then the permits must contain final effluent limits for CBOD, ammonia and total phosphorus consistent with those approved WLAs.

The final WQBELs should be clearly stated as final effluent limits in each "Permit Condition S1 DISCHARGE LIMITATIONS" or in each permit's "COMPLIANCE SCHEDULE." Since the WLAs for these dischargers are zero for pollutants that affect dissolved oxygen, EPA supports the approach of establishing critical period effluent limits based on the estimated natural condition concentrations in the receiving water.

2. The permit compliance schedules must include dates to meet the final WQBELs. Any compliance schedule contained in an NPDES permit must include an enforceable final effluent limitation and a date for its achievement that is within the timeframe allowed by the applicable state or federal law provision authorizing compliance schedules as required by CWA sections 301(b)(1)(C); 502(17); the Administrator's decision in *Star-Kist Caribe, Inc.* 3 E.A.D. 172, 175, 177-178 (1990); and EPA regulations at 40 CFR 122.2, 122.44(d) and 122.44(d)(1)(vii)(A). While we understand the difficulty of setting specific limits when there is uncertainty in the ability of the technology to meet them consistently, it is possible and necessary to calculate final effluent limits and place them in the permits with dates for compliance.

3. Interim limits should be clearly identified in each "Permit Condition S1." WAC 173-201A-160(4)(b) (2003 version - WAC 173-201A-510(4)(b)) requires interim effluent limitations to be formally established for the period of time during which compliance with water quality criteria is deferred. Chapter VI of Ecology's "Water Quality Program

Permit Writer's Manual" states that where there is an excursion of the water quality criteria that meets the criteria for 303(d) listing, the permit writer should develop interim effluent limits based on existing performance (no increase in loading) for placement in the permit. Initial interim limits should be based on the current performance of each facility (e.g. at the 95% confidence level as noted in Chapter IV of Ecology's "Water Quality Program Permit Writer's Manual") There could be a second tier of interim limits requiring compliance with 50 ug/l at the end of the first permit cycle. Federal regulations require that compliance schedules that are longer than one year in duration must set forth interim requirements and dates for their achievement (40 CFR 122.47(a)(3)).

B. The following paragraphs set forth additional objections that we have to the draft permits.

City of Spokane Riverside Park Water Reclamation Facility Objection (in addition to those identified above):

- Condition S4.A Design Criteria: The permit limits the flow based on a design average flow of 55.9 mgd during the dry season, The WLAs in the draft TMDL are based on 43.0 mgd. During this permit cycle and until compliance with final WQBELs is achieved, the maximum dry weather discharge flows must be those used to calculate WLAs in order to be consistent with the approved TMDL (40 CFR 122.44(d)).

Liberty Lake Water and Sewer District Objection (in addition to those identified above):

- Conditions S1.B Interim Phase 2 Effluent Limitations, S1.C Final Effluent Limitations and S4.A Design Criteria: The permit authorizes discharge of flows greater than 1 mgd upon approval of the facilities plan for implementing the requirements of the TMDL, the Foundational Concepts, and the Managed Implementation Plan. During this permit cycle and until compliance with final WQBELs is achieved, discharge flows must be those used to calculate WLAs in order to be consistent with the approved TMDL (40 CFR 122.44(d)). Increasing loading prior to installing treatment will contribute to further degradation of water quality, so the permit should be changed to require that 1 mgd shall not be exceeded until additional upgrades are online and operational.

C. The following paragraphs set forth comments on the draft permits and fact sheets that do not rise to the level of objection. These comments are recommendations to Ecology.

City of Spokane Riverside Park Water Reclamation Facility Comments:

1. Condition S2. MONITORING REQUIREMENTS: A Spokane River monitoring workgroup has been working on a monitoring scheme to track progress toward water quality restoration during implementation, but there is no mention of it here. If this Monitoring Plan is not final, there should be a reopener in the permit for including these monitoring conditions via permit modification when the plan is completed.
2. Condition S12. COMBINED SEWER OVERFLOWS

Bypass

Under the *1994 CSO Control Policy (Policy)*, a permit may authorize a CSO-related bypass of the secondary treatment portion of the POTW if certain conditions are met. In particular, the *Policy* states that “[f]or approval of a CSO-related bypass, the long term CSO control plan, at a minimum, should provide justification for the cut-off point at which the flow will be diverted from the secondary treatment portion of the treatment plant, and provide a benefit-cost analysis . . .” (*Policy* at p. 18693). Under this approach, a CSO-related bypass could be authorized in a permit in certain identified circumstances. As such, there must be sufficient information and justification in the administrative record supporting the requirements in 40 CFR § 122.41(m)(4) for the bypass. This information and justification should have been submitted as part of the City’s CSO Long-Term Control Plan (LTCP), and should be consulted in generating the CSO-related bypass permit condition. Guidance for the permit language may be found in *CSO Guidance for Permit Writers*. (EPA 832-B-95-008) (pages 4-34 to 4-37).

Elements of the administrative record and permit related bypasses:

- Provide adequate justification for the CSO-related bypass that supports all the requirements in 40 CFR § 122.41 (m) for approval of an anticipated bypass.
- Provide justification for the cut-off point at which the flow will be diverted from the secondary treatment portion of the plant, including a benefit-cost analysis demonstrating that conveyance to the POTW for primary treatment is more beneficial than other CSO abatement alternatives.
- The permit must include a separate condition that specifies a flow at which the CSO-related bypass will be allowed. Example permit language is provided in Exhibit 4-7 of *CSO Guidance for Permit Writers*.
- The permit must require written documentation of each bypass, including the volume of bypassed flow and the corresponding beginning and ending flow rates during which the bypass occurs.
- The permit must be modified to include specific monitoring during bypass events to ensure compliance with water quality standards.
- The permit must include requirements for appropriate notification of the CSO-related bypass to Ecology.

Post-Construction Monitoring

Post Construction CSO Monitoring Program. The permit lacks any specific post-construction water quality monitoring program requirements. Did the City develop a post-construction monitoring plan as part of the LTCP? The *1994 CSO Control Policy* requires a monitoring program that is adequate to verify compliance with WQS and protection of designated uses as well as to ascertain the effectiveness of CSO controls.

Comments related to the fact sheet:

1. Page 19: Update the discussion regarding final limits for CBOD, ammonia and total phosphorus.
2. Page 23, paragraph 2: Whenever effluent limits are less stringent than the corresponding limits in the previous permit, the fact sheet should contain a discussion of why the relaxed limit complies with the anti-backsliding provisions of the Clean Water Act (Section 402(o)) and any similar requirements of State law or regulations.
3. Page 28, last paragraph: Clarification is needed regarding a WLA of 10 ug/l versus an effluent limit of 10 ug/L.
4. Page 29, *Final Limits*: The final limits must be WQBELs rather than performance-based limits.
5. Page 31, table: The compliance schedule outlined in the fact sheet does not agree with the permit. The fact sheet sets a date of March 31, 2013 to attain 50 ug/L TP, while permit Conditions S1.B Effluent Limitations for Compliance with the Spokane River TMDL and S4.A Design Criteria extend the date to March 31, 2015.

Liberty Lake Water and Sewer District Comments:

- Conditions S1.A and B tables: The c and d footnotes are missing from the tables.

Comments related to the fact sheet:

1. Page 16, BOD₅, Ammonia, and Total Phosphorus: There should be an explanation of the presumption that CBOD and ammonia limits will be complied with if phosphorus removal is successful. Also, if phosphorus removal is not successful, the fact sheet should say that the CBOD and ammonia limits will still need to be complied with.
2. Page 25, Footnote 1: The facility should only be authorized to discharge up to 1 mgd until additional upgrades are online and operational.
3. Page 27, *Final Limits*: Final limits must be WQBELs rather than performance based.

Kaiser Aluminum Fabricated Products Comments:

1. Phosphorus interim and final limits: The performance-based interim limits for total phosphorus (S1.A.1, Page 6) are equal, to two significant figures, to the final total phosphorus wasteload allocation listed in the compliance schedule for total phosphorus (S7, Page 20). As such, it appears that the facility can meet the final wasteload allocation for total phosphorus with its current wastewater treatment facilities, meaning that a schedule of compliance for total phosphorus is not necessary.

We suggest one of the following:

Option 1: The phosphorus compliance schedule could be deleted from the permit. Because federal regulations governing compliance schedules (40 CFR 122.47) require compliance “as soon as possible,” and because past effluent data show that the facility can meet the phosphorus wasteload allocation with 95% confidence, we believe that it is “possible” for the facility to meet the phosphorus wasteload allocation immediately, thus there is no need for a compliance schedule.

The permit would include final average monthly and maximum daily effluent limits for total phosphorus, based on the wasteload allocation and historical effluent variability of total phosphorus in internal outfalls 002 and 003, or the performance-based limits currently proposed as interim limits, whichever is more stringent. The Department may also want to consider including BMP conditions in the permit to control or abate total phosphorus discharges (40 CFR 122.44(k)).

Option 2: The TMDL and/or the permit could reduce Kaiser’s phosphorus wasteload allocation, thus requiring that Kaiser reduce phosphorus discharges over the next 10 years by removing phosphorus prior to discharge through internal outfalls 002 and 003 while also including interim limits.

The administrative record must contain a demonstration that the compliance schedule meets the requirement in 40 CFR 122.47(a)(1), which states that schedules of compliance require compliance with effluent limitations as soon as possible.

2. Condition S2. MONITORING REQUIREMENTS: We suggest monitoring for total ammonia at internal outfall 003 (sanitary wastewater), and any other internal outfalls the Department determines are likely to contain ammonia.

We suggest monitoring for phosphorus in the river intake.

Comments related to the fact sheet:

1. Page 9: In cases where current effluent limits are retained on the basis that the permittee can meet the current limits even though re-calculated limits would be higher, we suggest that the fact sheet reference the anti-backsliding provisions of the Clean Water Act (Section 402(o)), federal regulations (40 CFR 122.44(l)) and any applicable requirements of State law and regulations, for example, discussion of chromium and aluminum.

2. Page 10: The BPJ determination not to require BOD and TSS percent removal requirements for the sanitary wastewater plant can also be supported using 40 CFR 133.103(d), special considerations for less concentrated influent wastewater for separate sewers.

3. Page 16: The foundational concepts may not be applicable to this discharge, for the reasons discussed above in the comments on the interim and final phosphorus limits.

4. Page 18, Temperature and pH: Upstream temperature was given as 69.6°C rather than °F. The reasonable potential for temperature needs to be calculated using the actual temperature conditions in the river.

5. Page 27, Table 1: The table shows that, in general, the sanitary treatment plant's discharges of BOD₅ have been well below the technology-based effluent limits proposed in the draft permit. Because BOD₅ discharges contribute to dissolved oxygen depletion in Lake Spokane, we suggest performance-based BOD₅ effluent limits for internal outfall 003 for the critical season, similar to the critical season BOD limits proposed for Inland Empire Paper (see Table 6 of the IEP fact sheet).

6. In general: Whenever effluent limits are less stringent than the corresponding limits in the previous permit, the fact sheet should contain a discussion of why the relaxed limit complies with the anti-backsliding provisions of the Clean Water Act (Section 402(o)) and any similar requirements of State law or regulations.

If you have any questions regarding these objections and comments, please contact Lisa Olson at (206) 553-0176

Sincerely,



Michael F. Gearheard, Director
Office of Water and Watersheds

cc: David Peeler, Water Quality Program Manager, WA Dept of Ecology, Olympia
Virginia Darrell, WQ Permit Unit Supervisor, Ecology, Eastern Regional Office
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